

What is claimed is:

**Claims:**

1. A method of using a managed network and a video cable system to deliver video data on-demand from a content provider to a cable system user comprising:

providing a listing of video data that is available from said content provider for selection by said cable system user;

5 using a first transport mechanism that is compatible with said managed network to transmit said video data through said managed network to a cable system provider in response to a request by said cable system user;

converting said first transport mechanism to a second transport mechanism that is compatible with said video cable system;

10 transmitting said video data to said user through said video cable system using said second transport mechanism.

2. The method of claim 1 where said step of providing a list of video data further comprises:

generating a request for said listing of video data that is transmitted from said cable system user through said cable to an internet service provider that is connected to said managed network;

5 providing said listing of video data that is available from said content provider that is transmitted from said content provider through said managed network, said internet service provider and said cable to said provider.

3. The method of claim 2 further comprising generating a request for a particular video data stream that is transmitted from said cable system user through said cable to an internet service provider that is connected to said managed network and said cable.

4. The method of claim 3 further comprising generating a confirmation signal and decoding information that is transmitted from said content provider to said cable system user through said managed network and said internet service provider to said cable.

5. The method of claim 1 wherein said act of using a first transport mechanism to transmit said video data through said managed network to a cable system provider further comprises:

using real time protocol as a transport mechanism in an IP managed network to  
5 transmit said video data through said IP managed network with at least a predetermined level of quality of service.

6. The method of claim 1 wherein converting said first transport mechanism to a Second transport mechanism comprises:

converting an IP transport mechanism to an MPEG transport mechanism.

7. The method of claim 5 wherein converting said first transport mechanism to a second transport mechanism comprises;

converting an IP transport mechanism to an MPEG transport mechanism.

8. The method of claim 7 wherein converting said IP transport mechanism to an MPEG transport mechanism further comprises:

separating timing data contained in said real time protocol from content data;

converting said timing data to adaptation information;

5 placing said adaptation information in adaptation fields of said MPEG transport mechanism;

combining said adaptation fields with corresponding content data.

9. The method of claim 8 further comprising:

multiplexing said adaptation fields and said content data on to said MPEG transport to generate an MPEG transport data stream;

digitally modulating said MPEG transport data stream to create a digitally  
5 modulated MPEG transport data stream;

up-converting said digitally modulated MPEG transport data stream to a selected frequency channel for transmission on said cable system.

10. A method of translating a data stream suitable for transmission on an IP Transport mechanism to a data stream suitable for transmission on an MPEG transport mechanism comprising:

5 separating timing data contained in said IP transport mechanism from content data;  
converting said timing data to adaptation information;  
placing said adaptation information in adaptation fields of said MPEG transport mechanism;  
combining said adaptation fields with corresponding content data.

11. The method of claim 10 further comprising:  
multiplexing said adaptation fields and said content data onto said MPEG transport mechanism.

12. A system for delivering video data on-demand from a content provider to a cable system user coupled to a cable system comprising;  
a content server that provides a listing of video data available from said content provider;  
5 a managed network coupled to said content server that is capable of transmitting said video data using a first transport mechanism upon receiving a request from said cable system user to produce a plurality of first transport data streams;  
a translator that translates said first transport data streams to a plurality of second transport data streams on a second transport mechanism that is compatible with said cable  
10 system.

13. The system of claim 12 wherein said first transport mechanism is an IP transport mechanism and said second transport mechanism is an MPEG transport mechanism.

14. The system of claim 12 further comprising:  
multiplexer that multiplexes said second transport data streams onto said second transport mechanism.

15. The system of claim 14 further comprising:

digital modulator that digitally modulates said second transport data streams,  
that have been multiplexed onto said second transport mechanism, onto an rf carrier signal.

16. The system of claim 15 further comprising:

up-converting said rf carrier signal that has been digitally modulated to a  
predetermined frequency channel or said cable system.

17. A method of delivering data on-demand from a content provider in response  
to a request from a user comprising:

transmitting said data from said content provider to a managed IP network;

transmitting said data on an IP transport on said managed IP network with a  
predetermined quality of service to a cable service provider that is coupled to a plurality of cable  
users on a cable system;

converting said data on said IP transport to an MPEG transport that is compatible  
with said cable system.